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ABSTRACT

This study sought to address three questions related to the pronunciation of Spanish by non-native speakers: (1) does the pronunciation of upper-intermediate become "fossilized?"; (2) is their a relationship between quality of pronunciation and amount of improvement?; and (3) when judging degrees of "foreignness," are linguistically trained native judges harsher than linguistically naive native judges? Eight intermediate learners of Spanish were recorded before and after a program in Spanish pronunciation, with 10 pairs of before and after sentences randomized and rated for quality of pronunciation by 4 native-speaking Spanish teachers and 4 native-speakers with no teaching or linguistic experience. The study found that although phonological fossilization was present in some subjects, it did not affect them in the same way. The results also indicated that some students benefitted considerably from pronunciation training, and that there were no significant differences in the ratings of linguistically trained and linguistically naive native judges. An appendix contains copies of a student language experience questionnaire, the rating scales, and the sample sentences. (Contains 39 references.) (MDM)

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Some Aspects of 'Foreignness' in the Pronunciation of Upper Intermediate English Students of Spanish

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SOME ASPECTS OF 'FOREIGNNESS' IN THE PRONUNCIATION OF UPPER INTERMEDIATE ENGLISH STUDENTS OF SPANISH

Carmen Santos Maldonado (DAL)

Abstract

The present study was designed to address the following three questions related to the pronunciation of Spanish as a foreign language: 1. Is the pronunciation of upper intermediate learners 'fossilized'? 2. Is there a relationship between 'quality' in pronunciation and 'amount of improvement'? 3. When judging degrees of 'foreignness', are linguistically trained native judges 'harsher' than linguistically naive native judges? Some upper intermediate learners of Spanish were recorded 'before' and 'after' a programme in Spanish pronunciation. Then the same ten 'before' and 'after' pairs of sentences of each student were carefully randomized and rated for quality of pronunciation by native speakers of Spanish. Results suggest, on the one hand, that phonological fossilization is present but does not affect everybody to the same extent; on the other hand, that even at this high level some students can benefit considerably from pronunciation training. We conclude by discussing the potential value of reconsidering the place of pronunciation in language teaching in a university setting.

1. Background

There can be few people learning a foreign language who do not wish to become proficient in all areas of the language: grammar, vocabulary and phonology. Although learners make mistakes at all three levels, there is a belief that grammar and vocabulary, but not phonology, can always improve. This view is widely reflected in foreign language teaching practice, and, while grammar and vocabulary are extensively worked on in the classroom, pronunciation is largely neglected soon after the initial stages of learning.

Although research in Interlanguage Phonology (IP) has been sparse, it is possible, according to Tarone (1987), to trace two major issues in this field. The first one refers to the nature of the processes shaping IP, processes such as transfer - both positive and negative - (Brière 1966; Altenberg and Vago 1987), first language acquisition factors (Wode 1976; Hecht and Mulford 1987), overgeneralization (Tarone 1987), approximation or phonological translation (Flege 1980, 1981, 1987a) and avoidance (Tarone 1987). The other major issue is the phenomenon of fossilization.

Attention to the concept of fossilization was drawn mainly by Selinker (1972) in relation to the Interlanguage Hypothesis. He defines fossilizable linguistic phenomena as those which are not likely to improve any further, 'no matter the

amount of explanation or instruction the learner receives in the TL' (Selinker 1972: 215). Fossilization is therefore the cessation of acquisition of any further knowledge before the learner has acquired a native-like level of performance. In the domain of syntax fossilization results in ungrammatical sentences, and in the domain of phonology it results in a 'foreign accent'. As adult L2 learners know only too well, it is virtually impossible to be taken for a native speaker in a conversation in the target language, sentences like 'you've got a very good accent', however reinforcing they may sound, do nothing but underline the fact that the non-nativeness has been noticed. This everyday experience is corroborated by Scovel (1969), who states very firmly that no adult ever achieves perfect native pronunciation in an L2. Asher and Garcia (1969) go even further by noting that even many children coming into contact with the target language as late as the age of six do not achieve completely native pronunciation. Not a very encouraging outlook! Without any doubt age is a primary factor influencing pronunciation, but it is not within the scope of this paper to examine the constraints on pronunciation mastery fully. An adequate discussion of the influence of these constraints has to bear in mind factors such as: age and the 'critical period' issue (Krashen 1973; Snow and Hoefnagel-Hohle 1982; Loewenthal and Bull 1984; Flege 1897b), second language input (Krashen 1985; Tahta, Wood and Loewenthal 1981b), motivation (Gardner and Lambert 1972; Suter 197o; Purcell and Suter 1980), affective factors (Guiora, Beit-Hallahmi, Brannon, Dull and Scovel 1972; Schumann 1976; Harder 1980), aptitude (Flege 1981, 1987b), sex (Tahta, Wood and Loewenthal 1981a, 1981b) and the first language (Suter 1976; Purcell and Suter 1980).

Not all researchers, however, pe[illegible]vard a pessimistic view about the possibility of acquiring good L2 pronunciation. [illegible]ufeld (1977) obtained very positive results with English-speaking young adults who were tested for their ability to reproduce, with the accuracy of a native speaker, the phonological features of two non-Indo-European languages: nine out of twenty L2 learners convinced three native speakers that the target language was their native language. Although Neufeld himself acknowledges the very restricted circumstances under which the experiment took place he is ready to admit that adults can sometimes learn an L2 pronunciation system with the accuracy of a native speaker, an idea that has very interesting implications for the teaching of pronunciation.

We would like to make two more points about fossilization in learning pronunciation. The first one refers to the definition of fossilization proposed by Selinker (1972), that an item becomes fossilized when it does not improve with instruction. It seems to us that this definition may run into a vicious circle because how do we know that no further instruction is required? How do we know that no further improvement will take place? Indeed if instruction stops maybe learning will cease also. It is only if the circle can be broken that we teachers are in a position legitimately to stop providing any more instruction related to the particular point which is thought to have become fossilized. A second point that teachers should bear in mind is the fact that fossilization is not a phenomenon that happens overnight. Although we know of no studies that have specifically investigated this view, it could be said that the curve representing the acquisition of L2 phonology is likely to be similar to the curve of other skills, specially to those which involve some motor control. These curves show that there is very rapid improvement at early stages of learning but that it increases more and more slowly at intermediate stages, finally, it becomes progressively more

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stable at advanced stages, so stable, in fact, that it could be assumed that in practical terms a time comes when no further progress is made. This is the stage that can be referred to as fossilization. If the above reasoning is also true of L2 pronunciation acquisition, then it follows that less advanced students would benefit more from a teaching pronunciation programme than would more advanced students, since they are still in a position to make some improvement.

Finally, a methodological point needs mention: that of testing L2 pronunciation accuracy by means of subjective judgments and ratings given by native speakers; many studies are based on these types of measurements (see for example Dimitrijevic and Djordjevic 1971; Mullen 1980; Yorozuya and Oller 1980; Brennan and Brennan 1981; Bezooijen and Hout 1985). In relation to this, in our study we were interested in knowing whether or not there is a basis for the widely accepted belief that linguistically trained people, i.e. linguists and language teachers, are more critical towards the language learner's achievements than are the linguistically naive speakers of that language. If the belief holds any truth, it could be argued that teachers are more severe raters because they are used to hearing a very wide range of 'quality' of pronunciation, which in turn would lead to an implicit comparison of the particular learner with their best students; and even if the learner in question is good they will tend to find some flaws in his or her speech as a result of this comparison. On the other hand, linguistically naive judges, especially if they do not speak other languages themselves, might tend to value the fact that a foreigner speaks their language at all more positively, and therefore tend to be more benevolent in their ratings. In our study we tried to see whether this was true or not.

In more concrete terms, this study was set up to address the following three questions:

1. Is the pronunciation of post-A Level students of Spanish fossilized? By fossilization here we understand no improvement after undergoing a specific Pronunciation Training Programme (PTP).

2. If there is any room for improvement at this level, is there a relationship between amount of quality in pronunciation (that is, how well or badly a particular student pronounces) and amount of improvement (that is, how much measurable progress somebody can make after the relevant instruction)? In our study 'good' and 'bad' pronunciation equals high and low marks on a 7-point scale. 'Amount of improvement' here means amount of 'after' repetitions rated better by the judges.

3. Concerning the use of native judges, are linguistically trained judges harsher in their judgements of foreignness than linguistically naive judges? Harsher judgement here mean giving lower marks on an overall pronunciation 7-point rating scale.

2. Method

2.1 Subjects

The informants of this study were part of a larger set of students who collaborated in the recordings of samples of Spanish as a foreign language. Our subjects were eight native speakers of English (three males and five females) studying Spanish in their first year of an Honours degree in Modern Languages at the University of Newcastle upon Tyne. The average age was 20 and the level of Spanish was post-A Level, which corresponds roughly to upper-intermediate in the level range elementary/lower-intermediate/upper-intermediate/advanced/proficient. All subjects cooperated voluntarily, but their motivation was supposedly quite high because a) it was a self-selected group and b) they had the oral exams for their course coming up shortly after the recordings, and they knew that the study was about pronunciation improvement. The influence that strength and nature of motivation can exert on pronunciation has been emphasized by numerous researchers (Flege 1987a, 1987b; Purcell and Suter 1980; Suter 1976; Gardner and Lambert 1972; Hill 1970).

Other relevant details of the informants' linguistic background were obtained by means of a questionnaire filled in when they first came to the recording studio. Given the multicultural background of some of the students who decide to do a degree in modern languages, it was important to make sure that in our study Spanish was genuinely a foreign language; we wanted a fairly homogeneous group. In fact, some people who had also volunteered for the experiment had to be ruled out on the basis of the information from the questionnaire (either one of the parents was a native speaker of Spanish or they themselves had spent some years in a Spanish speaking country and were virtually bilingual).

The questionnaire was specifically drawn up to meet the terms of the study and consisted of a few very short preliminary questions plus 13 multiple-choice questions about the following aspects related to the experience of learning Spanish (for a full version of the questionnaire we refer the reader to the appendix):

1. Parents' native language.
2. Country in which they spent the first five years of their life.
3. First contact with Spanish: whether it was through formal instruction or through naturalistic exposure, and at what age.
4. Years of formal instruction in the language.
5. Spanish teachers' first language.
6. Time spent in Spanish-speaking country with Spanish-speaking people.
7. Amount of classroom learning addressed to pronunciation of Spanish.
8. Importance attached to pronunciation of Spanish by the learner in regard to effective communication.
9. Concern about their own pronunciation in Spanish.
10. Importance of accurate pronunciation to obtaining a better job.

2.2 Procedure

The study was carried out according to the following procedure:

* selection of speech material and task,
* first recording,
* pronunciation training programme (PTP),
* second recording and
* ratings.

2.2.1 Selection of speech material and task

We used some preliminary speech material which consisted of 130 short model sentences taken from the recordings of Sánchez and Matilla (1986). These sentences had been selected and arranged in sets according to criteria of pronunciation difficulty for English speaking people. The criteria were based on discussions by Sánchez and Matilla (1986) and Stockwell and Bowen (1965), as well as on the researcher's own ideas. Half the sentences were spoken by a man and the other half by a woman, both representative of the standard accent of European Spanish. The semantic content of the sentences was of a neutral kind, of what Gass and Varonis (1984) call 'real world knowledge'. Subjects were to repeat them after only one hearing, so sentences were simple, with no embedding, to minimize the interference of lack of understanding or problems of memory in the repetition.

We decided that repetition served our purposes better than other techniques of eliciting data for pronunciation analysis, such as reading a passage aloud or spontaneous speech. Since we were only concerned with pronunciation and with no other aspect of language - vocabulary, grammar, fluency, etc - we thought it better if subjects did not have to worry about 'what to say', but only about 'how to say it'. Because we were interested in some quite specific problems of pronunciation, repetition had the further advantage that subjects could not use 'avoidance' as a strategy (Altenberg and Vago 1987; Schachter 1974). We ruled out reading aloud, as this clearly involves skills other than pronunciation, and mistakes may occur as a result of misinterpretation of spelling rather than actual inability to produce a particular sound accurately.

A selection of the material from the first recording (the model sentences repeated by our students) was listened to by three native speakers of Spanish including the researcher herself, and they agreed that there were four groups of consonant sounds primarily responsible for causing 'foreignness', namely the various phonological realizations in Spanish of: 1) the contrast between 't' and 'd' (as in *vengo de parte de Daniel*); 2) 'g' (as in *no me gustan los gatos gordos*); 3) 's' (as in *sus besos me saben a miel*) and 4) the contrast between 'r' and 'rr' (as in *mató al toro de dos tiros, habla un ruso horrible*). These four problematic aspects would constitute the object of our subsequent pronunciation training programme, and were the basis for the selection of material in the second recording, as well as for the final selection of the sentences to be rated by the native judges.

After the first recording a further selection was needed. Clearly it was necessary to remove all the sentences that had turned out to be too long, or too difficult as a result of unknown vocabulary. The rationale behind this further selection was to make sure

that the subject had understood the sentence properly, and that whatever problems he or she might have had in repeating were due to pronunciation difficulties and not to lack of understanding.

2.2.2 Recordings

Subjects were recorded in a recording studio on an individual basis. Each subject was given the same instructions before the researcher left the room. They had to repeat an aural model that was presented to them once; there was a pause of approximately 6-8 seconds between sentences. They could not stop and rerun the tape. It was not possible, with our equipment, to use headphones; we acknowledge the fact that this was a disadvantage, in a task in which repetition depended solely on hearing. Both recordings began with a set of 12 acclimatization-to-the-task sentences, so that subjects could see what the task involved.

The subjects were recorded twice, with a three-month interval and a five-session programme between both recordings.

> First recording: This lasted for about 10 minutes, and consisted of the repetition of the preliminary 130 sentences. Because it was the recording made prior to the PTP, it will also be referred to as the 'before-recording'. Some subjects made comments worth noting here: e.g. about one in three stated that they had found the woman more difficult to understand; some subjects felt that there was not enough time to repeat after some longer sentences; others said that the task was very demanding because it was too long. Although all the problematic sentences were removed from the final set, these aspects might have had a negative effect on the overall performance of some subjects.
>
> Second recording: This lasted for about 5 minutes, and consisted of the repetition of 62 of the above number of sentences, selected on the basis of the four groups of sounds that the study concentrated on. A number of sentences had to be removed because they had proved unsuitable (long, difficult vocabulary...). There was no new material. This recording will also be referred to as the 'after-recording', because it was done after the administration of the PTP.

2.2.3 Pronunciation Training Programme (PTP)

A programme of pronunciation training was designed specifically for the purpose of the study, to focus on the four pronunciation problems of our students. It consisted of five one-hour sessions held over ten days two weeks before the second recording; every session was divided into two parts:

1. Use of drama techniques.
2. Practice exercises in the language laboratory.

2.2.3.1 Use of drama techniques

Drama techniques have been widely applied in second language teaching, especially in the teaching of spoken communication skills and pronunciation. The particular techniques employed in our sessions are closely related to those practised by actors

in the theatre. The underlying principle is that to make full use of the voice, one needs to control all aspects involved in oral production: shaping of the mouth, posture, the mechanics of breathing, facial muscle control, etc. Our point here is that these aspects are even more significant when we pronounce in a foreign language. It is difficult enough to have to impose new articulatory habits on the ones that the learner has been operating with for so many years. The picture is worsened if we consider that speaking a foreign language has something about it of a 'public performance' - very much like actors on stage. The learner is usually too tense; the whole of the articulatory apparatus becomes stiff and rigid and therefore the free movement of tongue, lips and jaw is highly constrained.

Exercises on relaxation and posture, breathing, tone and articulation, have proved most useful in teaching L2 pronunciation. For a detailed account of how these techniques work in practice, we refer the reader to Wessels (1987). Many of the activities and exercises of our pronunciation programme were derived from this book as well as from various drama sessions conducted in Edinburgh in 1988 by the author and attended by this researcher.

2.2.3.2 Practice exercises in the language laboratory

The preparation of the exercises in the pronunciation training programme (PTP) were based on the following ideas:

1. Working on precise segmental problems which carry heavier weight in Spanish 'foreignness'.

2. Explaining and contrasting the differences between corresponding phonemes of the native and the target language.

3. Repeating and rehearsing (Asher and Garcia 1969) helps to produce a better performance. The idea is that practice makes, if not perfect, at least better (Tahta et al. 1981a; Tahta et al. 1981b).

4. One of the key principles of the PTP is the administration of immediate feedback of the performance by way of comparing one's pronunciation with that of the native speaker.

The PTP was aimed at correcting errors in the various pronunciations of Spanish 't' versus 'd', 'g', 's' and 'r' versus 'rr'. We considered that some work on vocalic sounds - especially on diphthongs - was also advisable. It goes without saying that at no time was the PTP thought to cover all pronunciation problems that our students presented. All sessions were conducted in Spanish by the researcher.

2.2.4 Ratings

2.2.4.1 Raters

Eight native speakers of Standard European Spanish took part in rating the performance of our subjects. Four raters had a linguistic background or were themselves teachers of Spanish as a foreign language. The other four were linguistically naive judges and had no teaching experience of any kind.

2.2.4.2 Rating material

After the two recordings, 10 of the model sentences were selected for the analysis. The list of sentences can be found in the appendix. Each model sentence had two realizations by each subject, one from the first recording and one from the second recording. Once the whole of the relevant material had been decided on we had to 'prepare' it appropriately for the raters. This is how it was arranged:

1. The 10 native models of the sentences were recorded on to a separate tape that we shall call the MASTER set.

2. For every subject the two relevant realizations ('before' the PTP and 'after' the PTP, pairs always in this order) of the 10 model sentences were identified and re-recorded in the same order as in the master set.

3. Next, for every subject's material two processes of randomization were carried out:

   3.1. Inter-pair randomization. The order of the 10 pairs, taken as 10 units, was randomized.

   3.2. Intra-pair randomization. The 'before' and 'after' PTP order of every pair was randomized, so that raters would not know *a priori* if they would be listening first to the 'before' or the 'after' realization.

4. The whole of the rating material was then recorded again. In the new recording, every pair of realizations was preceded by the corresponding native model. The recordings were arranged in two separate sets: 1) a FIRST SET, containing the speech material from subjects 1, 2, 3 and 4; and 2) a SECOND SET, containing the speech material from subjects 5, 6, 7 and 8. By keeping these two sets separate we were trying to neutralize the effect of fatigue on the work of the raters; so, 4 raters would listen to the FIRST SET (subjects 1, 2, 3 and 4) first, and the other 4 raters would listen to the SECOND SET (subjects 5, 6, 7 and 8) first.

5. Two more tapes were also edited. The first one we called the WARM-UP set: it contained five pairs (the first pair of subjects 1, 2, 3, 4 and 5) and its function was to acclimatize the judges to the rating task, making sure they had understood the instructions. We called the second tape the CONSISTENCY set: it also contained five pairs (the first pair of subjects 4, 5, 6, 7 and 8) and its purpose was to check whether raters were consistent in their judgements.

6. In short, there were five different sets of material for the judges to listen to:

   * The MASTER set,
   * the WARM-UP set,
   * the FIRST set (or SECOND set),
   * the SECOND set (or FIRST set),
   * the CONSISTENCY set.

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2.2.4.3 Rating tasks

All raters did their rating alone with the researcher. They were given written instructions (Appendix C) that they had to read carefully. As part of the instructions raters listened to the MASTER set, to acquaint themselves with the 10 model sentences and the voices of the native speakers. They also listened to the WARM-UP set, to become familiar with the rating sheet and the rating task itself. Attention was drawn to two important aspects of the material:

- The volume of voice of some speakers was on occasions a little 'low' (mainly for technical reasons or shyness of the speaker). Judges were urged to bear this in mind and not to let it influence the rating.
- Hesitations or repetitions of words should not be regarded as flaws in the quality of pronunciation itself.

Judges had to do two different kinds of rating task. The overall rating time was about 35 to 40 minutes. They could not stop and rerun the tape. There was a 2-3 minute break between each set.

A) First rating task

See rating sheet in the appendix. For every subject, pairs had been numbered 1 to 10. This first column matched three other columns containing the options: 'first repetition', 'second repetition' or 'Don't know'. Judges had to listen to the model and then the two repetitions and decide which of the two was better and tick the appropriate column. They had been urged always to make a judgement, and only to tick the 'Don't know' column if they really could not make up their minds as to which had better pronunciation. Listening to and rating the CONSISTENCY set was also part of this first task.

B) Second rating task

After completing the first task, judges additionally provided a separate rating of the overall pronunciation of every subject on a seven-point scale ranging from 1 (completely unintelligible pronunciation) to 7 (native accent).

2.3 Analysis of results

This study addressed three questions and we shall deal with them in turn.

2.3.1 Is the pronunciation of post-A level students of Spanish fossilized?

Results are summarized in table 1.

Table 1. *First task rating results for every subject.*

Subjects	'Before' better	'After' better	'Don't know'	χ^2	Significance ($p < .05$)
1	27	46	7	2.47	not sig.
2	37	35	8	0.028	not sig.
3	51	18	11	7.89	sig. worse
4	22	46	12	4.24	sig. better
5	19	55	6	8.76	sig. better
6	50	22	8	5.44	sig. worse
7	21	47	12	11.67	sig. better
8	35	37	8	0.028	not sig.
TOTAL	262	306	72	1.704	not sig.

Column 1: subjects; column 2: total number of 'before' repetitions rated as better; column 3: total number of 'after' repetitions rated as better; column 4: number 'Don't knows'; column 5: χ^2 value of the differences between 'before' and 'after'; column 6: significance.

If the null hypothesis was true, then there would be no effect of the PTP on the 'after' repetitions of the students (i.e. their pronunciation was fossilized).

We obtained from the judges 640 responses altogether - distributed in 'befores', 'afters' and 'don't knows'. The number of 'don't knows' was removed from the calculations on the grounds that when a judge was not sure which of the two realizations was better he or she was actually withholding judgement and these answers could not be counted either way.

From this analysis we can conclude that our null hypothesis holds, that is, no significant improvement was observed in the pronunciation of our students after the PTP. Let us see what happened when we considered not the group as a whole but the subjects separately.

1. Three subjects (4, 5 and 7) did significantly better in the 'after' recording.

2. Three subjects (1, 2 and 8) did not show any significant difference.

3. Two subjects (3 and 6) did significantly worse in the 'after' recording. This third point suggests that, for some students at least, the PTP was not only of no value at all but in fact had had some negative effect on their performance. This is an unexpected result and we shall come back to it in our discussion.

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2.3.2 Did weaker students improve more than better students?

In the answer to our previous question we saw that some students had improved and some had not. What can we then say about the relationship between the amount of improvement and the quality of the subjects' pronunciation? To find out we calculated a Spearman Rank Correlation Coefficient (r_S). It has already been explained that every subject was rated eight times on his or her overall pronunciation on a seven-point scale ranging from 1 (completely unintelligible accent) to 7 (native accent). We could now rank our students according to the two variables: the average score of how good or bad our raters thought they were and the number of better 'after' repetitions. Results are shown in table 2.

Table 2. *Ranking of subjects according to overall pronunciation.*

Subjects	Overall pronunc.	improvement after PTP	Pronunc. rank	Improvement rank
4	3.34	46	8	5.5
7	3.56	47	7	7
7	3.81	55	6	8
1	4.65	46	5	5.5
8	4.75	37	4	4
6	4.96	22	3	2
2	6.28	35	2	3
3	6.62	18	1	1

The table shows the relationship between quality of overall pronunciation and amount of improvement after the PTP.

From the table it seems that the lower the rating in overall pronunciation the more likely the subject is to gain improvement from the PTP. We tested our hypothesis of no correlation by carrying out a Spearman Rank Correlation Coefficient. Our value of $r_S = 0.851$ indicates a significantly ($p < .05$) strong negative correlation between our two variables, that is, the worse the pronunciation the greater the improvement from the PTP.

2.3.3 Are linguistically trained native speakers stricter in rating foreign students' pronunciation than linguistically naive native speakers?

To find this out we had to compare the ratings that the two different groups of raters had given to every student (table 3). The comparison was made by carrying out a Wilcoxon Matched-Pairs Signed-Ranks Test. This non-parametric measure makes no assumptions about the distributions of the ratings and is perhaps a safer statistic to use than a paired t-test. For every subject we had two mean values for overall pronunciation - one given by linguistically trained raters and one by linguistically non-trained raters.

Table 3. *Comparison of means obtained in ratings made by linguistically trained (LT) and linguistically non-trained (LNT) native raters.*

Subjects	LT Rating Means	LNT Rating Means
1	4.2	4.75
2	6.25	6.31
3	6.44	6.81
4	3.12	3.56
5	3.87	3.75
6	5.05	4.87
7	3.44	3.69
8	4.75	4.75

We obtained a value for T of 5 (critical value of T for significance at 5% level is 2) and thus we have to conclude that there was no difference between the way that the linguistically trained and linguistically naive native speakers rated pronunciation.

3. Discussion and further questions

From the analysis it appears that as a group our students made no significant improvement after the PTP. At the same time is clear that some students significantly benefited from it. There seems to be some confirmation of a tendency to show more phonological fossilization at more advanced levels of the language. With regard to judgements of foreignness, results seem to contradict the idea that some people (particularly students) have that teachers judge more strictly than other interlocutors.

3.1 How far can we generalize our results?

We are fully aware of the two main limitations of this study: the small number of subjects and the small number of sessions of the PTP. Our results should be taken rather as an invitation to further research. We do not know, for example, if a PTP twice as long will have better effects on the degree of improvement. Besides, is this improvement a lasting effect or does it fade away shortly after the second recording? Furthermore, we cannot at this stage be certain that the students who showed a significant improvement in controlled speech would really do better in spontaneous conversation.

3.2 How sure can we be that improvement in pronunciation was due to the PTP and not to an uncontrolled variable?

This question takes the explanation of improvement a step further. One such variable could be consciousness raising: the pronunciation of some of our students could have improved simply because attention had been drawn to the existence of problematic areas, irrespective of the PTP. We think, however, that consciousness raising is not a distinct variable but rather part of the explanation why a pronunciation programme may bring about some progress, because of the very nature of any such programme.

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A second factor that may account for the improvement in pronunciation is a desire on the part of the subjects to please the experimenter. We think that the effect of this factor in our study may only be negligible, because even if it had had some influence on the performance it would have probably affected both recordings equally, and therefore it would not have biased the relative results of our data.

3.3 Why were there two students that did significantly worse after the PTP?

This is a surprising result that needs looking into carefully. It is difficult to believe, although it might just be possible, that a PTP causes harm to somebody's pronunciation, unless, that is, the guidelines contained in the exercises for practice were utterly wrong. We are very confident that this was not the case in our PTP, because it had been meticulously planned according to a well documented description of the Spanish phonetic system (Navarro Tomás 1982; Stockwell and Bowen 1965).

Instead, we suggest two possible explanations for this unexpected negative effect. The first one is of a technical nature, and it refers to a difference in the volume at which the two recordings were made. There is evidence that this could well have been the case with the subject that showed the highest negative effect of the PTP (subject 3). For reasons that we could not control, the volume of his after-PTP recording was noticeably lower than that of the first recording. Although we had warned our judges about this technical problem it is possible that they consistently gave the 'better' score to the realization which they heard with less difficulty. This explanation is supported by the fact that both students in question had very good pronunciation according to the judges and, therefore, it was unlikely that there would be much difference between the two realizations of the sentences other than the actual volume of the recordings. This result underlines how important it is for the subsequent analysis of data to obtain as high-quality recordings as possible.

The second possible explanation that we would like to consider relates to a much more significant aspect. It suggests that when an individual has acquired a high standard in non-monitored speech, as was the case with these two subjects, concentration on very controlled items of speech may lead them to pronounce somehow 'less naturally' and therefore 'less authentically'. If this is true, we could further suggest that the more such student concentrates on a particular item, the less natural he or she may sound. It seems logical to conclude that the second recording sounded 'less natural', subjects 'overdid it', because the PTP had made them concentrate on the speech material even more than on the first occasion.

4 Conclusions: implications for teaching

In our previous sections we have discussed some problems related to the learning of pronunciation. If research is to have any value in practical terms, findings need to shed some light on the everyday practice of second language teaching. It is very important that teachers should be convinced that achieving a good pronunciation is something that needs attention on their part, which in practice means attention to the mistakes of the students and their correction.

Acquiring a good pronunciation is not something that occurs automatically, but it is a process that can be helped. MacCarthy (1978) points out the enormous help that

teachers can offer students before they go to a foreign country for their university year abroad. Being permanently immersed in the target language speaking situation does not automatically lead to a near-native command of the language. It is the role of the teacher to 'open' the students' ears and make them conscious of which particular aspects make 'native' pronunciation sound more native. This means working on auditory training before students are sent off to the foreign country. It is these less advanced students that are most likely to benefit from some kind of pronunciation training, as suggested by the results of our study.

Purcell and Suter (1980) argue that teachers and classrooms seem to have remarkably little to do with how well our students pronounce, since variables other than formal instruction seem to have much more impact on predicting pronunciation accuracy. However, we think that a good teacher can still stimulate the increase of concern and motivation that Purcell and Suter regard as so important for acquiring a good accent.

In the case of weak students, working on pronunciation can help them gain some confidence, this in turn may make them more active in linguistic interactions. Teachers may start by raising an overall awareness towards the spoken language. One of the aims, then, is to train students to listen actively, to 'observe' the target language. Good pronunciation is not only about uttering beautifully articulated sentences, it presupposes a high degree of ability to detect small acoustic differences.

In learning good pronunciation there is probably an element of 'naturalness' combined with an element of 'awareness'. It is our view that it is the latter that teachers must concentrate on to try to help students to achieve a better pronunciation. Neufeld (1977) has shown that adults can learn very good pronunciation, and this finding should encourage both teachers and researchers to find more ways of dealing with the remaining problems concerning the acquisition of the phonology of a foreign language.

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Appendix
Questionnaire

INSTRUCTIONS

Here is a questionnaire about your experience learning Spanish. You will be asked questions about specific facts of your life as well as your personal attitude to the problem of pronunciation in a second language. In every question you will see a number of statements. Please, read them carefully and then tick the box that most accurately reflects your own experience or feelings in every case.

NAME _____ AGE _____ SEX _____
YOUR NATIVE LANGUAGE IS _____
YOUR FATHER'S NATIVE LANGUAGE IS _____
YOUR MOTHER'S NATIVE LANGUAGE IS _____
COUNTRY IN WHICH YOU SPENT THE FIRST FIVE YEARS OF YOUR LIFE _____
YOUR COURSE AND YEAR AT UNIVERSITY _____

1 How did you first come into contact with Spanish?

[ ] Through formal instruction in an English-speaking environment
[ ] Through formal instruction in a Spanish-speaking environment
[ ] Through 'naturalistic' exposure in a Spanish-speaking country
[ ] Other way (please specify) _____

2 When did you first start learning Spanish?

[ ] Before the age of 7
[ ] Between the ages of 7-12
[ ] Between the ages of 12-16
[ ] After the age of 16

3 How many years of formal instruction in Spanish have you had?

[ ] Less than 3 years
[ ] 3 to 5 years
[ ] 6 to 8 years
[ ] More than 8 years

4 Your Spanish teachers

[ ] All of them have been native Spanish speakers
[ ] All of them have been native English Speakers
[ ] Most of them have been native Spanish speakers
[ ] Most of them have been native English Speakers

5 How long altogether have you spent in a Spanish speaking country with Spanish speaking people?

[ ] Less than 1 month
[ ] Between 1 month and 6 months
[ ] Between 6-12 months
[ ] Between 12-24 months
[ ] More than two years

6. How much formal classroom training directed specifically to pronunciation of Spanish have you had?

[ ] I have had no specific training at all
[ ] I was only given some guidance at the beginning of my learning
[ ] I have followed a course or done some specific practice periodically

7. To communicate effectively in Spanish, you think you need

[ ] To pronounce exactly as as native speaker would
[ ] To pronounce more o less correctly
[ ] To speak intelligibly

8. In relation to grammar and vocabulary of a second language you think that

[ ] Pronunciation is less important
[ ] Pronunciation is as important as grammar and vocabulary are
[ ] Pronunciation is more important

9. During the time you have been learning Spanish, do you think that your concern about pronunciation has been

[ ] Less than your course mates
[ ] About the same as your course mates'
[ ] Greater than your course mates

10. After a number of years of learning a second language, do you think that pronunciation

[ ] Can still improve, as can grammar and vocabulary
[ ] Can still improve, but to a lesser extent than grammar and vocabulary
[ ] Cannot improve

11. To improve your pronunciation in Spanish after a number of years, do you think you should mainly

[ ] Listen to native speakers
[ ] Talk to native speakers
[ ] Listen to yourself on tapes
[ ] Receive formal instruction on pronunciation

12. When you converse in English with a non-native speaker of English, how do you feel about 'bad' pronunciation?

[ ] It will not bother you as long as you can understand what he is saying
[ ] It will certainly put you off the conversation
[ ] You would think twice before engaging in a second conversation with that person

13. Do you think that you stand a better chance to obtain the kind of job you want if you pronounce Spanish well?

[ ] Yes, I think so
[ ] I am not sure
[ ] The accuracy of my Spanish pronunciation is irrelevant to the sort of job I want

THANK YOU VERY MUCH

Model sentences

1 Vengo de parte de Daniel
2 Mañana me lo darás todo
3 No me gustan los gatos gordos
4 Gota a gota se llena la bota
5 Sus besos me saben a miel
6 Esta especialidad no es para mi
7 María no quería mirarte a la cara
8 Mató al toro de dos tiros
9 Me gustan esas ropas rojas
10 Habla un ruso horrible

RATING SHEET

DATOS PERSONALES

NOMBRE _____

Profesor de español Si NO Sexo H M

Región de procedencia _____

Edad Años

Prueba nº 1			
	Mejor Pronunciac.		
Par.	1a	2a	No sé
1			
2			
3			
4			
5			

Código ___ Sujeto nº ___			
Mejor Pronunciac.			
Par.	1a	2a	No sé
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Código ___ Sujeto nº ___			
Mejor Pronunciac.			
Par.	1a	2a	No sé
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Código ___ Sujeto nº ___			
Mejor Pronunciac.			
Par.	1a	2a	No sé
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Código ___ Sujeto nº ___			
Mejor Pronunciac.			
Par.	1a	2a	No sé
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Código ___ Sujeto nº ___			
Mejor Pronunciac.			
Par.	1a	2a	No sé
1			
2			
3			
4			
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6			
7			
8			
9			
10			

Código ___ Sujeto nº ___			
Mejor Pronunciac.			
Par.	1a	2a	No sé
1			
2			
3			
4			
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6			
7			
8			
9			
10			

Código ___ Sujeto nº ___			
Mejor Pronunciac.			
Par.	1a	2a	No sé
1			
2			
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6			
7			
8			
9			
10			

Código ___ Sujeto nº ___			
Mejor Pronunciac.			
Par.	1a	2a	No sé
1			
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3			
4			
5			
6			
7			
8			
9			
10			

Prueba nº 2			
	Mejor Pronunciac.		
Par.	1a	2a	No sé
1			
2			
3			
4			
5			

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